

**Work Order ID 71878**

Wednesday, July 13, 2011 11:08:19 AM



Page 1

Item ID: D3401-041

Accept



Setup Start



Revision ID:

Item Name: Tow Cap Assembly

Stop



Start Date: 7/14/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan: *mf*Date: *11-07-13*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3401	Rev B

100



BAND SAW

Bandsaw

Memo

0.00

*RQ 11-8-16 10 ✓*

Jeaspa Bandsaw

Cut Blanks 4.20" Long

110



DOOSAN LATHE

Doosan

Memo

0.00

*RQ 11-8-16 10 ✓*

Doosan Lathe

Turn as per Folio FA532 &amp; Dwg D3401

Folio Rev: *A/1*Dwg Rev: *3*

Deburr

120



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

*RQ 11-8-16 10 ✓*

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

130

Operation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

HAAS CNC VERTICAL MACHINING #1

HAAS 1

HAAS CNC vertical machine #1

Memo

0.00

Machine as per Folio FA532 and Dwg D3401  
Dwg Rev: B Folio Rev: 44  
Identify as D3401-1  
Deburr & Buff rad as per Dwg D3401

and 11/08/26

10 ✓

135



QC2- Inspect parts off machine FAI/FAIB

0.00

and 11/08/26

10 ✓

QC

Quality Control

140



QC8- Inspect parts - second check

0.00

B.a 11/08/29

10 ✓

QC

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 3

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Item Name: Tow Cap Assembly

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Start Date: 7/14/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

150



Small Fab

Operation  
Description

Small Fab

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

SB 11/11/09

10

Small Fab

Small Fab

Memo

Drill and c'sink using DT8782 as per Dwg D3401

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Sululu

(ccw)

170



HandFinish

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

10x Smell 11/11/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**Work Order ID 71878**

Wednesday, July 13, 2011 11:08:19 AM



Page 4

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Revision ID:

Item Name: Tow Cap Assembly

Stop



Start Date: 7/14/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center ID

180



Powdercoat

Powder Coating

WU8434

Operation  
Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

7/13/0  
325 OF  
8-03

10X Smp 11/11/11

195



HandFinish

Hand Finishing

Assemble as per dwg

0.00

Memo

0.00

10 x t HJ 11/11/11  
Counted

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Wednesday, July 13, 2011 11:08:17 AM

Page 1

Work Order ID: 71878



Parent Item: D3401-041



Parent Item Name: Tow Cap Assembly

Start Date: 7/14/2011

Required Date: 7/28/2011

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP A□05.09.01□New issue□KJ/JLM□

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
NAS1330C3KB116		Purchased		No		100	Each	678.0000	4	40			

Insert



Location	Loc Qty	Loc Code
ST276	678	1119287
102606	200	
103185	36	
103337	442	

M6061T6R3.500



6061 RD bar 3.50

Purchased

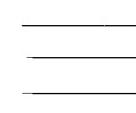
No

200 f 8.6970 0.35

3.684211



Location	Loc Qty	Loc Code
MAT005	3.027	
116808	3.027	
MAT036	5.67	
110993	5.67	



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	
Description: Toe Cap	Part Number:	D3401-1
Inspection Dwg: D3401      Rev: B		Page 1 of 1

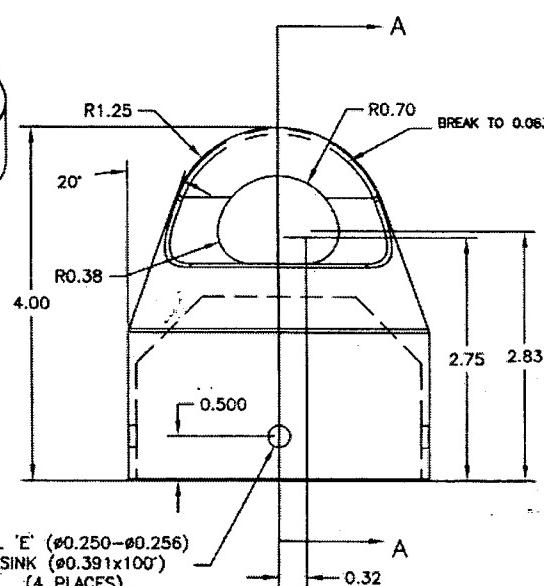
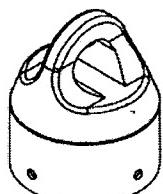
# FIRST ARTICLE INSPECTION CHECKLIST

## X First Article Prototype

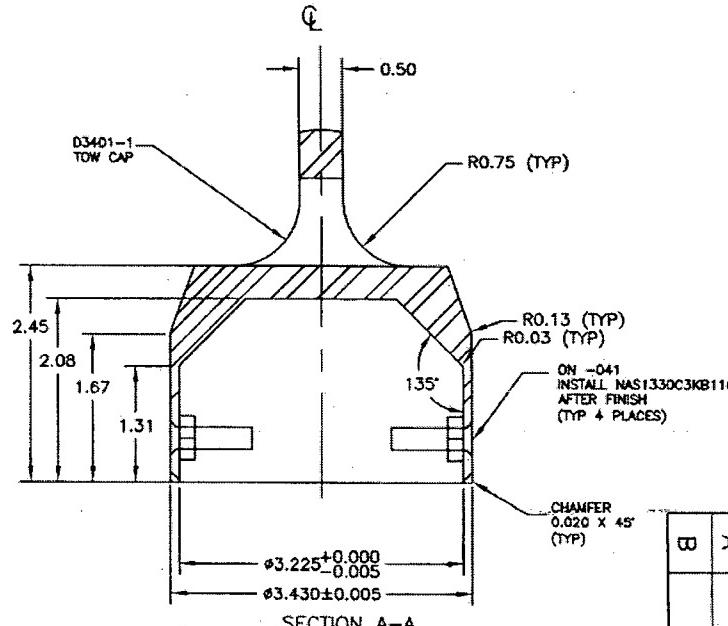
Measured by:	<u>Raf / smf</u>	Audited by:	<u>J.A</u>	Prototype Approval:	N/A
Date:	11/08/10	Date:	11/08/29	Date:	N/A

Rev	Date	Change		Revised by	Approved
A	06.06.02	New Issue	P/O D3401-041	KJ/JLM <i>[Signature]</i>	<i>[Signature]</i>

**DART**



**D3401-1 TOW CAP**



**D3401-1/-041 TOW CAP**

**D3401-1 TOW CAP**

- 1) MATERIAL: MAKE FROM ALUMINUM 6061-T6 Ø3.500 ROUND BAR PER QQ-A-225/8 OR AMS-QQ-A-200/8 (REF. DART SPEC M6061T6R3.5000)
- 2) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.015
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

**D3401-041 TOW CAP**

- 1) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1 POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3

**D3401-041 TOW CAP PARTS LIST**

QTY	PART NUMBER	DESCRIPTION
1	D3401-1	TOW CAP
4	NAS1330C3KB116	INSERT

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DESIGN PH	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO. D3401
DATE 05.06.09	DATE 05.02.24	TITLE TOW CAP
A	B	SCALE 1:12
		REV. B SHEET 1 OF 1

**RELEASED**  
# 71878  
05-08-09

**CHAMFER INSIDE, REMOVE RADIUS**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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